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Emerging Risks… Daring Solutions

Microinsurance – Key Performance Indicators

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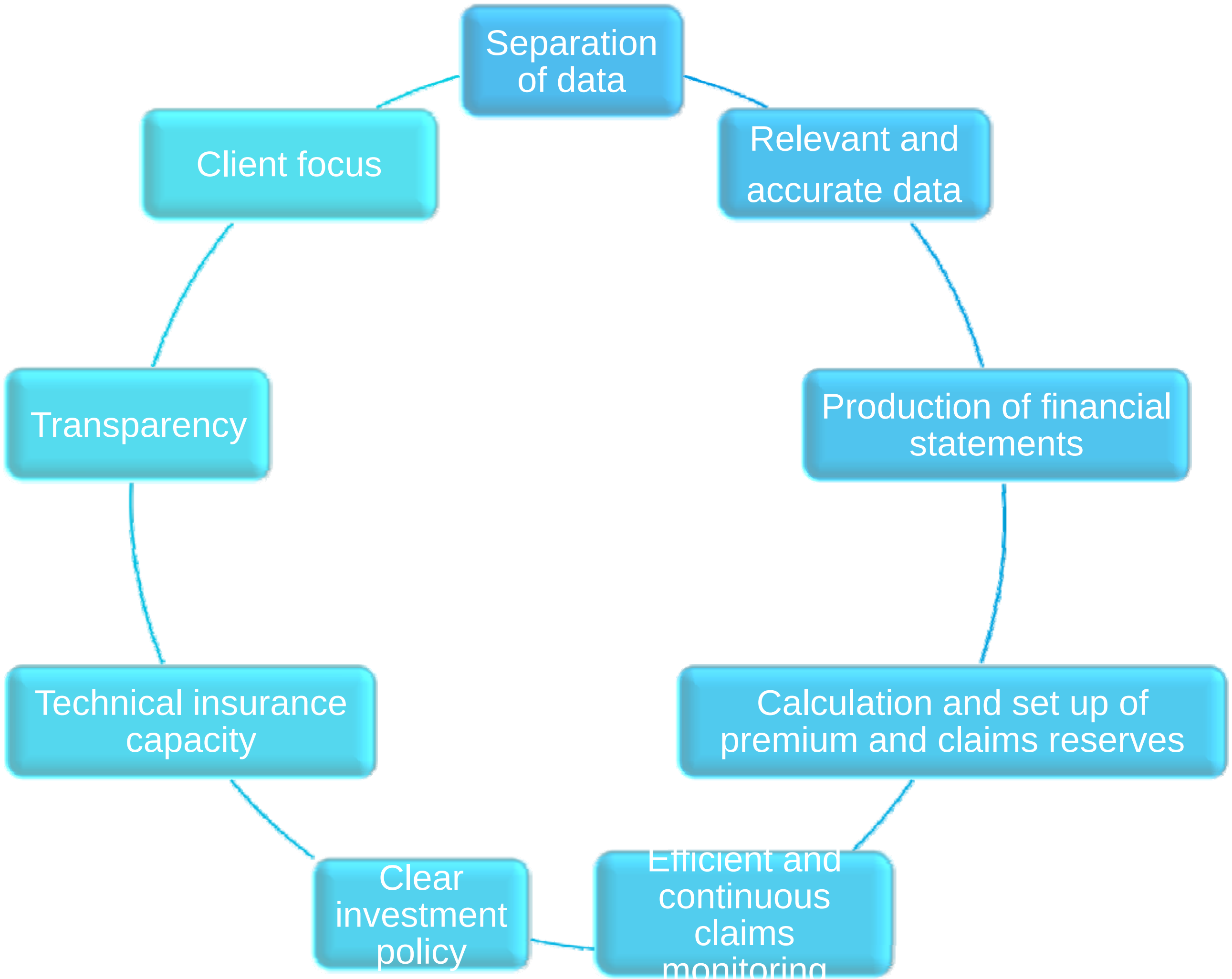
KEY FINANCIAL PERFORMANCE INDICATORS FOR MICROINSURANCE

A priori conditions = Accurate performance measurement

Nine Key Principles



Principle 1/9

Separation of data

Separate data per activity and per product

= specific responses, informed estimates

Risk Management through information
= capture and separate data

Principle 2/9

Relevant and accurate data

Be smart about collecting data

= adequate management information systems, extract statistics, history

Limits: costs, regulatory requirements,…

Principle 3/9

Production of financial statements

Important management tool

= production of timely financial statements

Balance sheet
Income statement
Cash flow statement

Principle 4/9

Calculation and set up of premium and claims reserves

Reserves give a true financial picture

= measure any outstanding liabilities at the end of each accounting period

Some examples:

- **Unearned Premium Reserve** (UPR) =
  Premium received but not yet earned *as of the accounting date*
- **Incurred but Not Reported Reserve** (IBNR) =
  Unreported claims that have been incurred and are payable in the future *as of the accounting date*
- **Claims in Course of Settlement** (CICS) =
  The claims that have been reported but have not been paid yet *as of the accounting date*

Principle 5/9

Efficient and continuous claims monitoring

Understand the risk profile of the clients

= look for developing trends and claims patterns

Informed management decisions on pricing, monitoring of moral hazard and adverse selection

Client data: Incurred date, reported date, payment date, cause, who makes the claim?, incurred costs

Principle 6/9

Clear investment policy

Prudence and asset diversification

= a formal policy should address at least asset quality, asset diversification and asset-liability matching (long-term products)

Asset-Liability Matching:

Project liabilities (e.g. claims, expenses)
for future periods and
Adjust the investment portfolio so that the investment earnings (e.g. interests, maturities) match the projected liabilities

Principle 7/9

Technical insurance capacity

The right staff and the right stuff

= insurance expertise, management and internal audits, and last, but not least, a good Management Information System (MIS)

"Good" MIS should include:

1. Relational database in normalized form
2. Applications for claims monitoring
3. Applications for indicator evaluation
4. Applications for financial and risk management

Principle 8/9

Transparency

Just more data is not the solution

= data should be accessible and presented in a meaningful and understandable language and format

Benchmarking and Regular external audits

Principle 9/9

Client focus

Good value product and efficient service

= pro-poor agenda, mission statement, impact oriented

= performance indicators should be analyzed from the client's perspective

Ten Key Indicators

Who has already experience with performance indicators?

Who is involved on a practitioner level?

= Understand the **relevance** and **importance** of performance indicators for microinsurance!

Significance (Client Focus)	Performance Indicator	
PRODUCT AWARENESS AND CLIENT SATISFACTION	Renewal Ratio	
	Coverage Ratio	
	Growth Ratio	
PRODUCT VALUE	Incurred Expense Ratio	
	Incurred Claims Ratio	
	Net Income Ratio	
SERVICE QUALITY	Promptness of Claims Settlement	
	Claims Rejection Ratio	
FINANCIAL PRUDENCE	Solvency Ratio	
	Liquidity Ratio	

Ten Key Indicators

Some points to keep in mind:

- Importance of principles = POWER to TRANSFORM PROCESS
- Look at TRENDS
- Combine and link indicators
- Interpret from the client’s perspective
- Not classical insurance = MONEY COMING IN AND GOING OUT
- Reinsurance is not a magic wand

PRODUCT AWARENESS AND SATISFACTION
Overview

1. **Renewal Ratio** = Number of Renewals / Number of Potential Renewals

   How many of your clients are coming back?

2. **Coverage Ratio** = Number of insured n / Target population n

   How many people of those you want to reach do you actually reach?

3. **Growth Ratio** = (Number of insured n – Number of Insured n-1) / Number of Insured n-1

   How many more new clients do you reach?

= *Marketing indicators, provide some measure of meeting client need and understanding of efficiency*

Important data

Definition of target population, client data

PRODUCT AWARENESS AND SATISFACTION
1. Renewal Ratio

Renewal Ratio = Number of Renewals / Number of Potential Renewals

Expected Range > 85%

Also sometimes known as Retention Rate

PRODUCT AWARENESS AND SATISFACTION
1. Renewal Ratio

What kind of problems do **low renewal rates** usually indicate (especially for programmes with voluntary participation)?

Some examples:

- ☹ Poor communication: The client does not understand the benefits
- ☹ Product misfit: The product does not meet the clients needs
- ☹ Bad service: It takes long before the client gets a claim paid
- ☹ Expensive product: The client cannot pay the benefits

Consequence: You need to find continuously new clients

PRODUCT AWARENESS AND SATISFACTION
1. Renewal Ratio

What do **high renewal rates** usually indicate (especially for groups with voluntary participation)?

Some examples:

- ☺ Product is meeting the clients needs
- ☺ Premiums are affordable and the service is good
- ☺ The benefit level is satisfactory and claims are usually paid
- ☺ The product is renewed automatically

Consequence: You can concentrate on expanding your client base

PRODUCT AWARENESS AND SATISFACTION
2. Coverage Ratio

Coverage Ratio = Number of insured n / Target population n

Expected range > 10%

- Voluntary participation programmes: "High" coverage ratio is generally a positive indicator that the programme is well received, that it is affordable and accessible by the target market
- Compulsory participation programmes: Depending on the situation, a "high" coverage ratio may have limited interpretive value but a "low" coverage ratio definitely indicates implementation problems
- A "low" coverage ratio: In the absence of underwriting, this is usually a reliable indicator of adverse selection and subsequent bad claims experience
- A "low" coverage ratio: Similar reasons that affect low renewal rate

PRODUCT AWARENESS AND SATISFACTION

3. Growth Ratio

- Small programmes → Growth may be faster due to smaller client base
- Growth rate will slow down as participation of a targeted population nears 100%
- Voluntary participation, high growth rate: an important indicator of marketing success → … marketing success in turn usually reflects good value
- Compulsory participation, high growth rate: could imply in some cases successful marketing, but in other cases is meaningless

PRODUCT AWARENESS AND SATISFACTION
3. Growth Ratio

What are some of the reasons for slow growth?

Some examples:

- ☹ Badly designed product
- ☹ Lack of insurance awareness
- ☹ Lack of promotion and marketing

Consequence: Your client base will not expand sufficiently

PRODUCT AWARENESS AND SATISFACTION Exercise

Organisation A	Year X	Year X+1	Year X+2
Renewal Ratio	5%	30%	50%
Coverage Ratio	2%	4%	10%
Growth Ratio	30%	20%	10%
Organisation B	**Year X**	**Year X+1**	**Year X+2**
Renewal Ratio	70%	30%	20%
Coverage Ratio	20%	18%	14%
Growth Ratio	30%	20%	10%
Organisation C	**Year X**	**Year X+1**	**Year X+2**
Renewal Ratio	90%	92%	91%
Coverage Ratio	50%	60%	70%
Growth Ratio	30%	20%	10%

Significance (Client Focus)	Performance Indicator	
PRODUCT AWARENESS AND CLIENT SATISFACTION	Renewal Ratio	
	Coverage Ratio	
	Growth Ratio	
PRODUCT VALUE	Incurred Expense Ratio	
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SERVICE QUALITY	Promptness of Claims Settlement	
	Claims Rejection Ratio	
FINANCIAL PRUDENCE	Solvency Ratio	
	Liquidity Ratio	

PRODUCT VALUE

1. **Incurred Expense Ratio** = Incurred Expenses / Earned Premiums

   How efficient is the delivery of the product?

2. **Incurred Claims Ratio** = Incurred Claims / Earned Premiums

   Is the product valuable for the client?

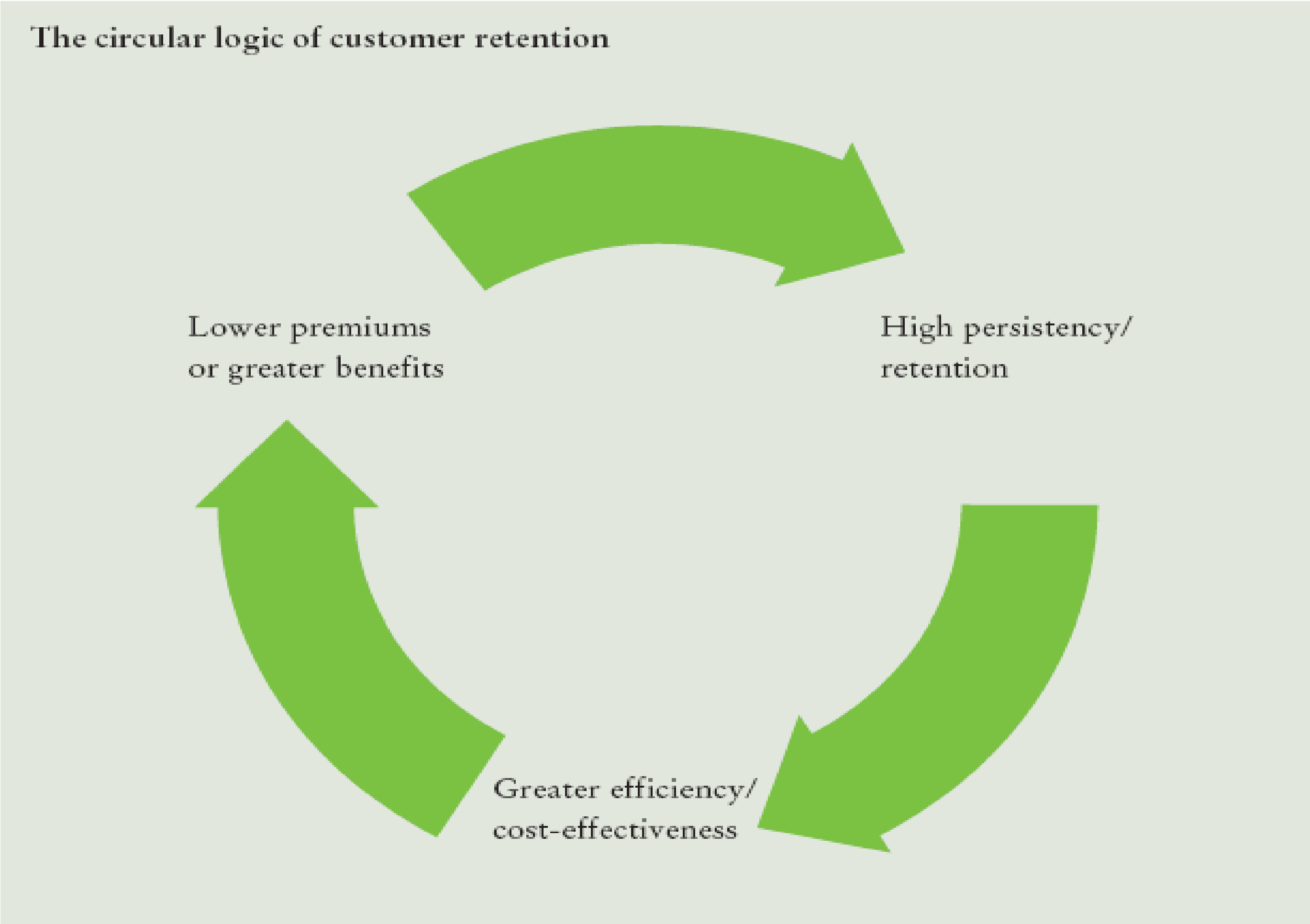
3. **Net Income Ratio** = Net income / Earned Premium

   Is the programme or product viable?

Important data

Premium, claims and expense on accrual basis.

PRODUCT VALUE
1. Incurred Expense Ratio



Garand and Wipf, 2006: Performance indicators and benchmarking. In Churchill, C. (ed.): Protecting the poor: A microinsurance compendium, Munich Re Foundation/ILO, Geneva, p. 325.

PRODUCT VALUE
1. Incurred Expense Ratio

Incurred Expense Ratio = Incurred Expenses / Earned Premiums

Virtual circle

Expected range <30%

By comparing the incurred expense ratio to other microinsurance programmes, an organisation may adopt alternative, more efficient processes

PRODUCT VALUE
2. Incurred Claims Ratio

Incurred Claims Ratio =

Incurred Claims / Earned Premiums

Expected range > 65%

PRODUCT VALUE
2. Incurred Claims Ratio

What are the possible reasons for the Incurred Claims Ratio being too high?

Some examples:

- ☹ Adverse selection or moral hazard
- ☹ Statistical fluctuation or covariance
- ☹ The product has not been priced properly

Consequence: The product will be a danger to the organisation's viability

PRODUCT VALUE
2. Incurred Claims Ratio

What are the possible reasons for the Incurred Claims Ratio being too low?

Some examples:

- ☹ Statistical fluctuation or covariance
- ☹ Lack of understanding of the risk pool
- ☹ Too many claims are being denied or it is to difficult to claim

Consequence: The product will not sell

PRODUCT VALUE
3. Net Income Ratio

Net Income Ratio

= Net income / Earned Premium

Expected range 0+ to 10%

THIS IS THE KEY OF THE KEY INDICATORS!

- Measures if the programme is viable
- Watch the direction and trend over a period of time
- Normal for start-ups that first years are negative

PRODUCT VALUE Exercise

Organisation A	Year X	Year X+1	Year X+2
Incurred Expense Ratio	50%	55%	45%
Incurred Claims Ratio	110%	115%	120%
Net Income Ratio	-60%	-70%	-65%
Organisation B	Year X	Year X+1	Year X+2
Incurred Expense Ratio	9%	7%	4%
Incurred Claims Ratio	98%	98%	98%
Net Income Ratio	-4%	-1%	3%
Organisation C	Year X	Year X+1	Year X+2
Incurred Expense Ratio	135%	35%	20%
Incurred Claims Ratio	90%	95%	95%
Net Income Ratio	-120%	-20%	-10%

Significance (Client Focus)	Performance Indicator	
PRODUCT AWARENESS AND CLIENT SATISFACTION	Renewal Ratio	
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	Growth Ratio	
PRODUCT VALUE	Incurred Expense Ratio	
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SERVICE QUALITY	Promptness of Claims Settlement	
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FINANCIAL PRUDENCE	Solvency Ratio	
	Liquidity Ratio	

SERVICE QUALITY

Definitions

1. Promptness of Claims Settlements = Number of days from event reported to benefits received by clients

How satisfied are your clients?

2. Claims Rejection Ratio = Incurred Claims / Earned Premiums

How well do the clients understand the product?

Important data

Maintaining data on date of event, date received and date paid

SERVICE QUALITY
1. Promptness of Claims Settlements

Promptness of Claims Settlements =

Number of days from the covered event to benefits received by clients

Expected range: 90% within 7 days

- "Efficient, accurate and fast" claims settlement should be the servicing standard for all microinsurance programmes
- Important to settle quickly because benefits due are needed to deal with an emergency
- Objective is to settle fast enough so that the insured will not have to borrow from expensive sources or have to sell off productive assets

SERVICE QUALITY
1. Promptness of Claims Settlements

What are some of the causes of poor performance?

- In partner-agent models: insurer adjudicates instead of the microinsurer or without the microinsurer pre-processing claims
- Excessive documentation requirements and incomplete documentation
- Lack of assistance and facilitators in the field
- Claimants lack essential papers such as birth certificates

SERVICE QUALITY
2. Claims Rejection Ratio

Claims Rejection Ratio =
Incurred Claims / Earned Premiums

Expected range > 0% …< 10%

What are the reasons for high Claims Rejection Ratio in health, either partial or total rejection of claims?

- ☹ The service provider has not been accredited
- ☹ The benefit maximum has been reached
- ☹ The claim includes charges for services not rendered

Reasons for high Claims Rejection Ratio for Accidental Death & Dismemberment?

- ☹ Natural death was claimed as an accidental death
- ☹ Disability is due to sickness, not accident

SERVICE QUALITY
2. Claims Rejection Ratio

In general, why is a Claims Rejection Ratio high?

Some examples:

- ☹ The risk event which led to the claim is not covered by the policy
- ☹ The waiting period has not finished
- ☹ The insured became ineligible for coverage but was unaware of it
- ☹ The insured gave incorrect information when applying (age, health, etc)

Consequence: The product will not be resold easily

SERVICE QUALITY
Exercise

Promptness of Claims Settlement, is percentage of claims settled within 7 days

Organisation A	Year X	Year X+1	Year X+2
Promptness of Claims Settlement	10%	20%	45%
Claims Rejection Ratio	20%	15%	10%
Organisation B	Year X	Year X+1	Year X+2
Promptness of Claims Settlement	99%	99%	99%
Claims Rejection Ratio	2%	2%	2%
Organisation C	Year X	Year X+1	Year X+2
Promptness of Claims Settlement	60%	70%	80%
Claims Rejection Ratio	0%	0%	0%

Significance (Client Focus)	**Performance Indicator**	
PRODUCT AWARENESS AND CLIENT SATISFACTION	Renewal Ratio	
	Coverage Ratio	
	Growth Ratio	
PRODUCT VALUE	Incurred Expense Ratio	
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SERVICE QUALITY	Promptness of Claims Settlement	
	Claims Rejection Ratio	
FINANCIAL PRUDENCE	Solvency Ratio	
	Liquidity Ratio	

FINANCIAL PRUDENCE

Definitions

1. Solvency Ratio = Admitted Assets / Liabilities

What is the ability to meet future obligations?

2. Liquidity Ratio = Available Cash or Cash Equivalents / Short-term Payables (3 months)

What is the ability to meet short term obligations?

Important data

Calculated actuarial reserves, investments, estimate of expected payouts

FINANCIAL PRUDENCE
1. Solvency Ratio

Solvency Ratio =

Admitted Assets / Liabilities

Expected range: > 110% but < 250%

- Measures the financial strength of the microinsurance programme
- Measures the ability to meet future obligations

If a programme is allowed to fail,

it will affect all others in the industry as clients lose trust and confidence

FINANCIAL PRUDENCE
2. Liquidity Ratio

Liquidity Ratio =

Available Cash or Cash Equivalents / Short-term Payables (3 months)

Impact of a low Liquidity Ratio?

- Liquidity ratio too low: → impairs timely claims and expenses payment → negative impact on the programme

Impact of an overly high Liquidity Ratio?

- Ratio should be > 110% but not too high
- Ratio too high → lower investment earnings → raise insurance cost because higher premium needed

Strong solvency ratio does not imply sufficient liquidity

FINANCIAL PRUDENCE

Exercise

Organisation A	Year X	Year X+1	Year X+2
Solvency Ratio	500%	400%	300%
Liquidity Ratio	150%	200%	250%
Organisation B	Year X	Year X+1	Year X+2
Solvency Ratio	90%	100%	105%
Liquidity Ratio	300%	300%	300%
Organisation C	Year X	Year X+1	Year X+2
Solvency Ratio	60%	70%	80%
Liquidity Ratio	50%	60%	70%

Contact details

Microinsurance Network

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Toolkit & Workshops Performance Indicators for Microinsurance

- www.microfact.org
- Support and FAQs: microfact@brs-vzw.be

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IAA Microinsurance Working Group Purpose

To serve as the IAA body that coordinates the micro-insurance efforts of the various IAA Committees and Sections and provides a focal point for IAA efforts to help facilitate the development of micro-insurance and actuarial involvement in this rapidly growing, and socially meaningful area.

Terms of Reference

- Establish a formal IAA role with the ILO Micro-Insurance Innovation Facility in Geneva and other key organizations that might be identified.
- Participate in, along with qualified actuaries with expertise in micro-insurance, key conferences and meetings of the international micro-insurance community.
- Take a leading role in defining and developing specialized training needed for actuaries to become qualified to practice in the micro-insurance area, in conjunction with the IAA Education Committee.
- Identify micro-insurance experts (both actuaries and non-actuaries). Encourage and facilitate their involvement in appropriate IAA and member association meetings, committees, and IAA Sections.
- With active participation of IAA Sections, create a forum for practicing micro-insurance actuaries to share their experiences and expertise with other actuaries and, as appropriate, with the micro-insurance community.

Membership

- Membership of the Working Group is open to all individuals with the relevant expertise and interest
  - Howard Bolnick (USA), chair
  - Vice-chair – open
  - Currently 33 Members (more to be recruited)
    - Most with microinsurance experience and many working in the field for microinsurance projects
    - Members working in microinsurance organizations: ILO Microinsurance Facility, World Bank
  - Liaison with key national actuarial associations: India, UK, Australia, South Africa, Canada, Mexico (others in process)
  - Liaison with IAA Committees and Sections: Insurance Regulation, Health Section, AWB (others in process)